

ABSTRACT

5 A capacitive sensing circuit coupled to a variable capacitor. The circuit comprises a sense pulse generator providing a first polarity sense pulse and a second polarity sense pulse; a sense capacitor coupled to the sense pulse generator; a charge detector coupled to the sense capacitor; and a storage device coupled to the charge detector. The storage device may be a sample and hold circuit, a capacitor or a buffer. Multiple capacitors may be provided to enable a position detection  
10 scheme which is suitable for use in an optical mirror switching array. An analog to digital converter may be coupled to the storage device and a digital demodulator device coupled to the output of the analog to digital converter.